

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
14 November 2002 (14.11.2002)

PCT

(10) International Publication Number  
WO 02/089836 A1

(51) International Patent Classification<sup>7</sup>: A61K 39/00,  
39/385, 39/395 // A61P 35/00

MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG,  
SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
VN, YU, ZA, ZM, ZW.

(21) International Application Number: PCT/GR02/00027

(22) International Filing Date: 25 April 2002 (25.04.2002)

(25) Filing Language: English

(26) Publication Language: English

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR,  
GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent  
(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,  
NE, SN, TD, TG).

(30) Priority Data:  
20010100237 9 May 2001 (09.05.2001) GR

Declaration under Rule 4.17:  
— of inventorship (Rule 4.17(iv)) for US only

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Published:  
— with international search report  
— before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

WO 02/089836 A1

(54) Title: CANCER METASTASIS INTERFERING VACCINE

(57) Abstract: A vaccine that has been synthesized by a polyvalent substrate and the idiotype parts of antibodies that recognize antimetastatic peptides. The vaccine induces the production of antiidiotype antibodies that inhibit metastasis formation. It is known that the ability of a cancer cell to metastasize is primary dependent by its property to bind with extracellular matrix proteins such as laminin and fibronectin. On these proteins the antimetastatic sequences (peptides) YIGSR and RGD have been discovered since 1991. Attempts to use these peptides either per se or as constituents of polymers in order to inhibit spontaneous metastasis in experimental animals had only limited results because of the limited life time of this preparation in the circulation. Using the described vaccine the immune system is leaded to the production of antiidiotype antibodies that have shape and properties similar to the antimetastatic peptides YIGSR and RGD. Pilot experiments indicated that these antibodies can inhibit the formation of spontaneous metastasis in experimental animals.